



# MS TEAMS

## Deployment Process

*Quick Reference Guide*

v4b 2020Q2

**MOMENTUM**

T E L E C O M

## Overview

Momentum Telecom offers MS Teams™ phone system integrations. Customers preparing to deploy MS Teams with Momentum Telecom will have options\* for how the deployment process may be completed.

### Option 1. Assisted Deployment - Professional Services

With this option, the customer provides administrator-level credentials for access to related customer accounts and services, and the Momentum Telecom Professional Services team completes all deployment tasks. *(Fees Apply)*

### Option 2. Integrated Self-Service

Customers with experienced and trained MS Teams Administrators also have the option to perform MS Teams back-end setup and management tasks with Momentum guidance, support, and assistance.

To be clear, regardless of the deployment option chosen, there are still items that must be completed by the customer / vendor to ensure a successful on-boarding process.

Customer Requirements (To Do)	Momentum Telecom Requirements (To Do)
Ensure that all users have been assigned proper Office 365 Licenses	Setup Tenant Direct Routing (via PowerShell)
Setup Office 365 SBC Domains	Pair Primary and Secondary SBCs to the Tenant
Create Office 365 Temporary Users	Create PSTN Usage policies
Provide Admin level access credentials to Office 365 account(s).	Enable Direct Routing for User(s)

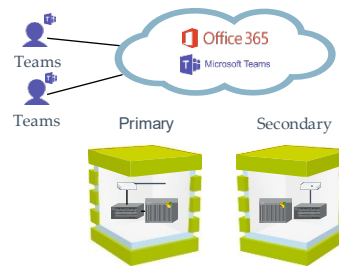
Please note that Momentum Telecom will not be responsible for the provisioning of Microsoft Teams-based services and features like Hunt Groups, Auto Attendants, or Calling Queues.

This document provides an overview of the MS Teams customer / Third party vendor requirements in preparation for deployment and offers useful setup and management task instructions.

\*The deployment options and tasks are subject to change.

## MOMENTUM WITH MICROSOFT TEAMS

Momentum's unique architecture allows you to take advantage of Microsoft Teams *and* fully integrate into the Momentum voice platform so that your users get the amazing collaborative benefits of Microsoft Teams, plus the UC Enterprise features that just are not available with Microsoft Teams alone. These UCaaS features include Call Center, Auto Attendants, Hunt Groups, Call Recording, and much more, providing a solution that really works for you.

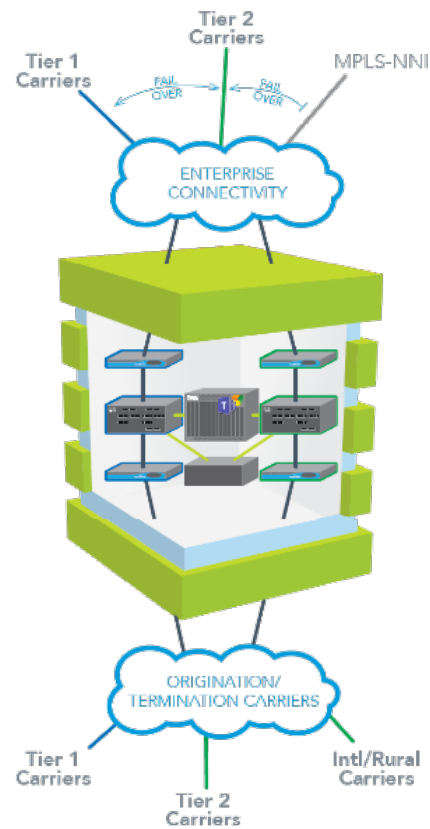


Momentum's Philadelphia Data Center

Momentum's Atlanta Data Center

## MOMENTUM'S REDUNDANT NETWORK

Momentum's redundant, high availability, multi-tenant infrastructure offers the secure and flexible solution your business requires... It is next level + reliability.



## Deployment Steps

The following list provides the basic steps and relevant information, licensing or access required to setup and manage Direct Routing deployment with MS Teams:

### 1. Office 365 User License Assignment Requirements

To complete this step, the customer must purchase and assign all needed Office 365 user licenses prior to enabling Direct Routing.

The customer must have one or more of the following O365 license levels for users in place to enable Direct Routing.

- ❖ Microsoft 365 Business Basic + Microsoft 365 Business Voice (Without Calling Plan)
- ❖ Microsoft 365 Business Standard + Microsoft 365 Business Voice (Without Calling Plan)
- ❖ Microsoft 365 Business Premium + Microsoft 365 Business Voice (Without Calling Plan)
- ❖ Microsoft Apps for business + Microsoft 365 Business Voice (Without Calling Plan)
- ❖ Microsoft Apps for enterprise + Microsoft 365 Business Voice (Without Calling Plan)
- ❖ Microsoft 365 F1 + Microsoft 365 Business Voice (Without Calling Plan)
- ❖ Office 365 F1 + Microsoft 365 Business Voice (Without Calling Plan)
- ❖ Microsoft 365 and Office 365 Education A1, A3, or A5 (+ Microsoft 365 Business Voice - Without Calling Plan)
- ❖ Microsoft 365 Nonprofit Business Basic + Microsoft 365 Business Voice (Without Calling Plan)
- ❖ Microsoft 365 Nonprofit Business Standard + Microsoft 365 Business Voice (Without Calling Plan)

The following licenses may be combined with either Microsoft 365 Business Voice or Phone System Licensing:

- ❖ Microsoft 365 and Office 365 Nonprofit E1, E3
- ❖ Office 365 E1
- ❖ Office 365 E3
- ❖ O365 E5 Licensing is a stand-alone license that is Direct Routing ready.

**Note:** Microsoft 365 Business Voice licenses are available for purchase only through a Microsoft CSP.

For additional licensing resources and further details on Microsoft 365 Business Voice please visit:

<https://docs.microsoft.com/en-us/office365/servicedescriptions/Microsoft-365-business-voice-service-description>

**When licenses have been assigned, complete one of the following:**

#### ***For Option 1: Assisted Deployments + Professional Services***

##### **Provide Office 365 Account Access**

Customer to provide Momentum with Administrator-level access credentials for the Customer's Office 365 account + related services or systems. (Credentials are fully secured). The Momentum Account Manager requires full access for the following roles:

- ✓ **Teams Service Admin**
- ✓ **Skype for Business Admin**

#### ***For Option 2: Integrated Self-Service Deployments***

**Use the self-service deployment steps (2-4) listed with instructions below.**

## 2. Set Up Office 365 SBC Domains

Customer must add and verify two (2) domains to their Office 365 Tenant. These domains will be used as Fully Qualified Domain Names (FQDNs) for the Primary and Secondary SBCs.

- a. Momentum must provide the following Domain information to the customer:
  - Primary SBC domain: ***RPX ID-ATL01.completeuc.com***
  - Secondary SBC domain: ***RPX ID-PHL01.completeuc.com***  
***Example: 308766235-ATL01.completeuc.com***
- b. Customer must use the *Add New Domain* setup wizard to add the two domains listed above to their Office 365 Tenant and validate their domain ownership.

Note: The *Skype for Business Online service* must be selected during domain setup.

***Example: TXT Record: 308766235-ATL01***  
***TXT Record Value: MS=ms57865131***
- c. Momentum must create DNS *subdomains* for the primary and secondary SBCs (step a.) and update them with the TXT DNS records provided by the Customer (step b.)

## 3. Create Office 365 Temporary Users

Once the setup for the Domains and Subdomains has been completed, the customer must create temporary users utilizing the domain as the host portion of their username:

- a. Create One (1) USER on the Office 365 account with Primary Domain as the host portion of the username and a valid license (See list above in step 1) assignment.
- b. Create One (1) USER on the Office 365 account with Secondary Domain as the host portion of their username and a valid license (See list above in step 1) assignment.  
***Example: tempuser1@308766235-ATL01.completeuc.com***

These licenses can be unassigned or reassigned AFTER both SBCs are set up as gateways for Direct Routing.

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*WAIT 24 HOURS FOR REPLICATION ACROSS THE SYSTEM*

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*The following steps must be completed by an Administrator who is an experienced PowerShell user.*

## 4. Set Up Direct Routing

- a. Download and Install the Skype for Business Online PowerShell module from: <https://www.microsoft.com/en-us/download/details.aspx?id=39366>
- b. Connect to Skype for Business Online using PowerShell.

### Regular Deployment:

```
Import-Module SkypeOnlineConnector
$credential = Get-Credential
$sfbSession = New-CsOnlineSession -Credential $credential
Import-PSSession $sfbSession -AllowClobber
```

### Using Two-Factor Authentication:

```
Import-Module SkypeOnlineConnector
$sfbSession = New-CsOnlineSession
Import-PSSession $sfbSession
```

### For Hybrid Deployment:

Please use the **-OverrideAdminDomain** parameter with the default domain that was included with your Office 365 subscription.

```
Import-Module SkypeOnlineConnector
$credential = Get-Credential
$sfbSession = New-CsOnlineSession -Credential $credential -OverrideAdminDomain "customerDomain.onmicrosoft.com"
Import-PSSession $sfbSession -AllowClobber
```

- c. Pair Primary and Secondary SBCs to the Tenant.

```
New-CsOnlinePSTNGateway -Fqdn 308766235-ATL01.completeuc.com -SIPSignalingPort 5061 -MaxConcurrentSessions 1000 -ForwardCallHistory $true -Enabled $true
```

```
New-CsOnlinePSTNGateway -Fqdn 308766235-PHL01.completeuc.com -SIPSignalingPort 5061 -MaxConcurrentSessions 1000 -ForwardCallHistory $true -Enabled $true
```

- d. Create PSTN Usage.

```
Set-CsOnlinePstnUsage -Identity Global -Usage @{Add="Momentum-All"}
```

- e. Create Primary route to SBC in ATL and assign it to 'Momentum-All' PSTN Usage.

```
New-CsOnlineVoiceRoute -Identity "ATL-All" -NumberPattern "." -OnlinePstnGatewayList 308766235-ATL01.completeuc.com -Priority 1 -OnlinePstnUsages "Momentum-All"
```

- f. Create Secondary route to SBC in PHL and assign it to 'Momentum-All' PSTN Usage.

```
New-CsOnlineVoiceRoute -Identity "PHL-All" -NumberPattern "." -OnlinePstnGatewayList 308766235-PHL01.completeuc.com -Priority 2 -OnlinePstnUsages "Momentum-All"
```

- g. Create voice routing policy and assign it to 'OnlinePstnUsage'.

```
New-CsOnlineVoiceRoutingPolicy "Momentum-ALL" -OnlinePstnUsage "Momentum-All"
```

## Basic User Management

### To Enable Direct Routing for a User

1. Use PowerShell to connect to Skype for Business Online.
2. Configure user's phone number and enable enterprise voice and voicemail.

```
Set-CsUser-Identity "username" -OnPremLineURI tel:+14054157145 -EnterpriseVoiceEnabled $true -HostedVoiceMail $true
```

3. Assign voice routing policy to the user.

```
Grant-CsOnlineVoiceRoutingPolicy "username" -PolicyName "Momentum-All"
```

### To Disable Direct Routing for a User

1. Use PowerShell to connect to Skype for Business Online.
2. Disable Enterprise Voice and Voicemail and remove phone number from a user.

```
Set-CsUser -Identity "username" -EnterpriseVoiceEnabled $False -HostedVoiceMail $False -OnPremLineURI $null
```

3. Remove routing policy from the user.

```
Grant-CsOnlineVoiceRoutingPolicy -Identity "username" -PolicyName $null
```

### To Modify a Phone Number for a User

1. Use PowerShell to connect to Skype for Business Online.
2. Configure user's phone number and enable enterprise voice and voicemail.

```
Set-CsUser -Identity "username" -OnPremLineURI tel:+14054157149
```

## Related Resources

The following information sources may be useful to Voice Engineers and/or Office 365 Admins:

**Direct Routing Setup:**

<https://docs.microsoft.com/en-us/microsoftteams/direct-routing-configure>

**Cloud Voice in Microsoft Teams:**

<https://docs.microsoft.com/en-us/microsoftteams/cloud-voice-landing-page>

**Media Quality and Network Connectivity Performance:**

<https://docs.microsoft.com/en-us/SkypeForBusiness/optimizing-your-network/media-quality-and-network-connectivity-performance>

**Monitoring and troubleshooting Direct Routing:**

<https://docs.microsoft.com/en-us/microsoftteams/direct-routing-monitor-and-troubleshoot>

**Office 365 Network Connectivity Principles:**

<https://docs.microsoft.com/en-us/office365/enterprise/office-365-network-connectivity-principles>

**Implement QoS and Monitor Call Quality in Microsoft Teams:**

<https://docs.microsoft.com/en-us/MicrosoftTeams/monitor-call-quality-qos>

**MS Teams Call Analytics and Call Quality Dashboard:**

<https://docs.microsoft.com/en-us/MicrosoftTeams/difference-between-call-analytics-and-call-quality-dashboard>